

OSMOSIS (BLISTER) PROTECTION & TREATMENT

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Step-by-step guide to osmosis protection

osmosis (oz-mO'sis, os-), *-n.*

Dictionary definition;

The diffusion of fluids through membranes or porous partitions.

Yachter's definition;

Boat owner's greatest enemy.

Water absorbs through gelcoat causing damage and weight gain.

Can be prevented with the GELSHIELD® SYSTEM.

AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE...

The importance of having a **moisture-free** hull cannot be overemphasised. **The drier the laminate, the lighter the hull, the better the performance, the more efficient fuel use and the longer the gelcoat life.** A boat hull that has **absorbed moisture will also sit lower in the water than intended and will reduce the responsiveness** of the boat.

The GELSHIELD® SYSTEM was designed to repair hulls which have experienced gelcoat blistering. However, the best time to attack hull blistering is before it happens. Taking preventative action before a problem occurs will greatly reduce the likelihood of an expensive repair and increase resale value. If you're buying a new boat, protect your investment with the GELSHIELD® SYSTEM before it ever goes in the water!

Stop the Blisters

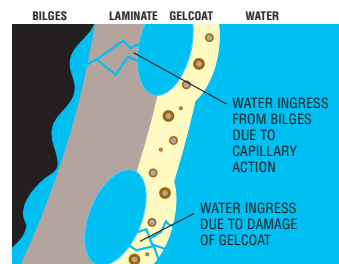


fibreglass

blister repair & prevention

WHAT IS OSMOSIS?

Osmosis is a process of degeneration within a glass fibre laminate. It is caused by a chemical reaction between water and unreacted substances remaining in the manufactured hull. The water enters the hull through the gelcoat and, once inside, reacts with the chemical components creating acidic substances. These substances create pressure behind the gelcoat, which causes blisters and eventually cracking. Once the gelcoat is breached in this manner, the underlying laminate is capable of absorbing water like a sponge.



Osmosis is not only caused by water on the outside of the hull – bilge water from the inside can also cause a problem. It is therefore worth making efforts to keep your bilges dry.

WHEN MIGHT OSMOSIS OCCUR?

Any unprotected hull is likely to show signs of osmosis eventually, like rust on a car.

The exact length of time before osmosis occurs depends on many factors, including: the type of water in which the hull is moored; the temperature of the water and most importantly, the quality of the original hull construction.

In some cases, reactive impurities in the gelcoat and laminate will cause osmosis in the early life of the boat. This is a structural problem and should be referred back to the boat manufacturer. However, even well-built, fibreglass hulls will eventually experience osmosis and blistering. This is why we recommend applying an epoxy protection layer, even to new boats.



REMEMBER: PREVENTION IS BETTER THAN CURE! **STOP THE BLISTERS**